



## 2015-16 Postsecondary Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### College or University Certifications

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution’s eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority’s jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution’s equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools 2015-2016

Public 4-Year     Public 2-Year     Private Non-Profit

Name of President/Chancellor (as it should appear in the official records): **President Cheryl Norton**  
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.)

Official College or University Name (as it should appear on an award): **Slippery Rock University**

College or University Street Mailing Address: **One Morrow Way, Slippery Rock, PA 16057**  
(If address is P.O. Box, also include street address.)

County: **Butler** IPEDS Number\*: **21036**

Telephone: **724-738-2000** Fax: **724-738-2169**

Web site/URL: **http://www.sru.edu** E-mail: **Cheryl.norton@sru.edu**

\*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

  
(President’s/Chancellor’s Signature)

Date: 12/09/2015



**Nominating Authority’s Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university’s eligibility and compliance with the following requirements is true and correct to the best of the Authority’s knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority’s jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **Pennsylvania Department of Education**

Name of Nominating Authority: **Mr. Pedro Rivera**  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Date: 1/22/2016

\_\_\_\_\_  
(Nominating Authority’s Signature)

**SUMMARY AND DOCUMENTATION OF NOMINEE’S ACHIEVEMENTS**

Provide a coherent summary that describes how your college or university is representative of your jurisdiction’s highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and their underlying Elements. Then, include concrete examples for work in every Pillar and Element. Only institutions that document progress in every Pillar and Element can be considered for this award.

**SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [ed.green.ribbon.schools@ed.gov](mailto:ed.green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

**Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



**Pennsylvania Application for  
U.S Department of Education Green Ribbon Schools  
2015-16 Postsecondary Sustainability Award**

**CONTACT INFORMATION**

**College/University Name:** Slippery Rock University

**Street Address:** One Morrow Way, Slippery Rock, PA 16057

**Website:** www.sru.edu/sustainability

**President/Chancellor Name:** Dr. Cheryl Norton, President

**President/Chancellor Email Address:** Cheryl.norton@sru.edu      **Phone Number:** 724-738-2000

**President/Chancellor Signature\*:** 

**Program Contact Name (if different):** Paul W. Scanlon, PE, LEED AP

**Program Contact Email:** paul.scanlon@sru.edu      **Phone Number:** 724-738-4268

**Program Contact Signature\*:**

*\*By signing this application, the President/Chancellor and/or Program Contact assure(s) that the information provided is accurate to the extent possible.*

**School Demographics**

<b>Basic Classification</b>	<b>How would you describe your school?</b>	Total Enrolled: <u>8628</u>
<input type="checkbox"/> Public 2-year	<input type="checkbox"/> Urban	Undergraduate Total: <u>7583</u>
<input checked="" type="checkbox"/> Public 4-year	<input type="checkbox"/> Suburban	Graduate Total: <u>1045</u>
<input type="checkbox"/> Private Not-for-profit	<input checked="" type="checkbox"/> Rural	Graduation Rate (150% of normal time): <u>68%</u>
<input type="checkbox"/> Private For-profit	<input type="checkbox"/> Multiple campuses	% Undergraduates Receiving Pell Grants: <u>32%</u>
<input type="checkbox"/> Other		Average Institutional Net Price: <u>15471</u>

**Has your IHE received any awards for facilities, health or environment?**  Yes  No

**Award(s) and year(s):**

- National APPA Sustainability Award in Facilities Management (2015);
- Princeton Review's Guide to 332 Green Colleges (2014)
- University of Indonesia GreenMetric international college/university survey (SRU ranked 65th internationally in 2014);
- Sierra Club "Cool Schools" List (SRU ranked 92nd in 2013);
- Healthiest Employers, Inc.'s "One of the Top 100 Healthiest Workplaces in America" (2014);
- Pittsburgh Business Times' "Healthiest Employers of Western Pennsylvania" Award (2015);
- The Education Trust (SRU ranked 15th in U.S. in 2015 for vastly improving completion rates)
- Winner, 2011 Active-U Challenge (International Competition for the Most Active Campus, American College of Sports Medicine)
- Safewise Safe Colleges List (SRU ranked 11th safest college in the U.S. in 2015)



<b>Minority-Serving Institution (check all that apply):</b>		
<input type="checkbox"/> AANAPISI	<input type="checkbox"/> HSI	<input type="checkbox"/> PBI
<input type="checkbox"/> ANNH	<input type="checkbox"/> NASNTI	<input type="checkbox"/> TCU
<input type="checkbox"/> HBCU		
<b>Is your IHE participating in a local, state or national program which asks you to benchmark progress in any or all of the Pillars?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Program(s):</b> <ul style="list-style-type: none"> <li>• Association for Advancement in Sustainability in Higher Education (AASHE) Presidents' Climate Commitment STARS Report (achieved Silver Certification in 2014)</li> <li>• Sightlines Facilities Asset Advisors' Facilities Benchmarking &amp; Analysis</li> <li>• PSFEI PASSHE Annual Utilities Usage Report</li> <li>• Clean Air, Cool Planet Campus Carbon Calculator (for annual greenhouse gas emissions inventories).</li> <li>• American College Health Association - National College Health Assessment survey (for tracking student physical activity level)</li> </ul>		

<b><u>ED-GRS Pillars and Elements</u></b>	<b><u>Points</u></b>
<b>PILLAR I: Reduce environmental impact and costs: 30%</b>	
Element 1A: Energy Conservation and efficiency, reduction in Greenhouse gas Energy management and conservation Green buildings standards Reduction in GHGs	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Municipal solid waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
<b>PILLAR II: Improve the health and wellness of students and staff: 30%</b>	
Element 2A: Integrated campus environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality Moisture control Chemical management	15 points
Element 2B: Health and Wellness Coordinated Campus Health Fitness and outdoor time Food and Nutrition	15 points
<b>PILLAR III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%</b>	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	10 points
Element 3C: Development and application of civic knowledge and skills	10 points
<b>Total</b>	<b>100 points</b>



**Summary Narrative:** Provide a 1,500-word maximum narrative describing your institution's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative, yet replicable, practices and partnerships. Be sure to cover every ED-GRS Pillar and Element. Use the bullets below as a guide to frame your narrative and include relevant information that the reviewers are looking for during their evaluation of your application. Please note that if your institution is selected as an award recipient by USDE, this summary will be used in public-facing documents and recognition.

- *Is your institution participating in a local, state or national school program, such as the U.S. Environmental Protection Agency's ENERGY STAR Portfolio Manager or Association for Advancement of Sustainability in Higher Education's STARS, or others that ask you to benchmark progress in some fashion in any or all of the Pillars?*
- *Has your institution, staff or student body received any awards for facilities, health or environment?*
- *Has your institution sought or achieved Leadership in Energy and Environmental Design (LEED), Green Globes or other green building standards? What certificate or level has your institution obtained?*
- *Do you use the Federal High-Performance Sustainable Buildings Checklist in Portfolio Manager to assess campus building(s)?*
- *What efforts have you made to reduce environmental impact and costs?*
- *How have you improved student and staff health?*
- *How have you provided effective environmental and sustainability education?*
- *What are your unique and innovative practices and partnerships?*

SRU signed the American College and Universities Presidents' Climate Commitment in 2009 and participates in the AASHE STARS reporting system to benchmark our progress in the three ES-GRS Pillars (our STARS Report achieved Silver Certification in 2014). We also use a Sightlines Facilities Asset Advisor program to benchmark our progress with similar institutions of higher education, and the American College Health Association - National College Health Assessment survey for benchmarking student physical activity levels.

We have received achievement awards in each of the categories, including:

- National APPA Sustainability Award in Facilities Management (2015),
- Princeton Review's Guide to 332 Green Colleges (2014),
- University of Indonesia GreenMetric international college/university survey (SRU ranked 65th internationally in 2014),
- Sierra Club "Cool Schools" list (SRU ranked 92nd in 2013),
- Healthiest Employers, Inc.'s "One of the Top 100 Healthiest Workplaces in America" in 2014,
- Pittsburgh Business Times' "Healthiest Employers of Western Pennsylvania" award in 2015.
- Safewise Safe Colleges (SRU ranked 11th safest college in U.S. in 2015)
- Winner, 2011 Active-U Challenge (International Competition for the most active Campus, American College of Sports Medicine)

In 2015, SRU was ranked in the top 15 universities in the country for vastly improving completion rates for all students over the last decade, and particularly for its success in increasing graduation rates for underrepresented students and decreasing the gap in completion rates between underrepresented and white students. The ranking was part of a new Education Trust report, "Rising Tide: Do College Grad Rate Gains Benefit All Students?"

SRU has also been recognized for fostering a campus culture that embraces physical activity, achieving a "Gold Level Campus" ranking from The American College of Sports Medicine for its "Exercise is Medicine" program.

SRU has achieved LEED Certification for eight buildings totaling 32 percent of our total buildings area, including LEED Silver (for the Smith Student Center and four Phase I New Residence Halls), LEED Certified (for two Phase II New Residence Halls), and LEED Silver for Existing Buildings O&M (for the Macoskey Center Harmony House).

SRU uses a variety of tools to assess campus buildings performance, including our AASHE Climate Action Plan (which includes energy audits and building re-commissioning activities to assess the performance of our facilities).



We update our greenhouse gas emissions inventory annually, and have documented a reduction of 8,876 MTeCO<sub>2</sub> (over 18 percent) in GHG emissions since our base year 2005. We also track progress in reducing our energy use using our Annual Utility Usage Reports prepared by the Penn State Facilities Engineering Institute (PSFEI) for all PASSHE universities, and have shown a 22 percent reduction in energy use since our base year 2005 - despite the increase in our campus facilities area by 32 percent during this period. These results have been achieved using a variety of strategies including physical renovation of buildings; replacing aging facilities with new energy efficient facilities; implementing ESCO programs and behavioral change programs; reducing coal use by 71 percent; and installing a central heating plant baghouse that minimizes airborne particulates.

In order to protect our environment and on-campus Audubon Sanctuaries, SRU uses a Land Use Request Form and process that requires presidential approval of all activities involving campus grounds. The Office of Sustainability processes all requests and draws on facilities staff and environmental/science faculty to review such uses before recommending approval by the president.

SRU also provides Green Fund Grants to fund sustainability/environmental projects proposed by students, faculty, and/or staff. These grants have been used to fund occupancy sensors for classrooms, additional building electric meters, sustainable conference fees for students and faculty, additional recycling bins, a lighting control system for the football stadium, cardboard recycling bailer machines, water bottle filling stations to discourage the use of disposable plastic water bottles, and energy dashboard displays at our Residence Halls for use in energy and recycling competitions.

Other efforts to reduce our environmental impact include reducing single occupant vehicle use by providing free bus service for on and off-campus activities; investing in electric maintenance vehicles; producing biofuel from used cooking oil; recycling, composting and minimizing waste; using local foods and trayless dining in our dining halls; using green roofs and an onsite stream/retention pond system to reduce stormwater runoff; and using alternative energy (including on-site demonstration systems and 7.5 million kWh/year in purchased electrical Renewable Energy Credits).

A President's Commission on Wellness was created in 2014 to coordinate/facilitate educational opportunities related to healthy lifestyles, and to support free activities such as zumba and yoga classes, a 10,000 step-a-day walking program, nutrition classes, and a noon jogging club. Our exercise science program is in part facilitated through the use of personal trainers assigned to individuals wanting to enhance their fitness and health through exercise; each year, more than 140 people take advantage of this assistance. Staff can also earn "Healthy U. Points" that reduce health insurance premiums, and 82 percent of our staff participate in this program.

SRU's Student Health Services (SHS), staffed by twenty health care professionals and accredited by the Accreditation Association for Ambulatory Health Care, Inc., is open 24/7 to provide clinical care, health promotion and public health services to all SRU students. Total contacts for clinical and non-clinical services were 66,373 in FY 2015. Student learning outcomes gained through our wellness programs include personal development by demonstrating intellectual curiosity, a commitment to wellness, and emotional/spiritual growth. SHS's Continuous Quality Improvement Reports demonstrate that student learning has improved through the health promotion and clinical services offered. Fall 2014 health promotion student learning outcomes responses exceeded the performance measure of 80 percent, with students in attendance able to correctly answer the student learning outcome question at a range of 92 - 100 percent. Students visiting the campus health center for nonemergent care are screened for physical activity participation; if students report fewer than 150 minutes of moderate-intensity physical activity per week, they are counseled on physical activity and offered a referral to receive personalized guidance for their own physical activity program. The majority of the students report that Student Health Services has also helped them stay healthy and stay in the classroom.

SRU also provides Step UP! bystander intervention training to all incoming students which addresses how to proactively help others in our community and discusses sensitive issues such as alcohol, sexual assault, discrimination and academic dishonesty.

SRU's President's Commission on Sustainability, which includes representatives of a cross section of the entire campus and community, provides guidance on community outreach activities and development of additional curricular and co-curricular sustainability courses and activities. SRU currently offers 19 sustainability-focused courses, 29 courses that include sustainability components, eight sustainability-focused undergraduate degrees, three sustainability minors programs, and two sustainable Masters Degrees (including a Master of Education Degree in Environmental Education). We are also developing



a Sustainability Certificate that students of any major can achieve by completing one course from each of the three Triple-Bottom Line metrics of sustainability, a capstone experience in Principles of Sustainability, and twelve hours of stewardship. Student peer educators provide two classes (“Energy Use on Campus” and “Introduction to Sustainability”) as part of SRU’s FYRST (first year studies) program, as well as guided tours of the many sustainability demonstration projects at The Robert A. Macoskey Center for Sustainability Education and Research.

SRU regularly partners with the Slippery Rock Rotary Club, Slippery Rock in Bloom, local schools and businesses, and Sustainable Slippery Rock (SSR), a community organization focused on helping local residents become more aware of sustainable practices and educating them on environmental/sustainability issues. We help SSR and other community partners reach out to students and the broader community by co-sponsoring speaker events and helping promote upcoming programs through the use of our website and social media.

The SRU Sustainable Energy Accelerator (SEA) is a unique, SRU-managed nonprofit organization led by the School of Business that partners with many local businesses and nonprofits to provide students with practical experience in helping organizations become more sustainable and energy efficient. One such project is the “Rock Roast” triple certified coffee program, in which coffee from shade-grown organic coffee plantations will be produced and sold in partnership with the Smithsonian Institution’s Migratory Bird Center and Golden Valley Farms. This structure creates “profits” used to fund students’ immersive sustainability experiences working and learning on a coffee plantation in South America. Another SEA project involves partnering with a nonprofit to research, build, operate and document best practices for an aquaponics garden that will then be replicated in a village in Ghana, where it will produce fresh greens and tilapia, both healthy cash crops. The aquaponics garden is expected to use only 10 percent of the water used in conventional gardening while producing twice the produce per acre.

SRU also partners with the local community in the annual Fall leaf collection program (leaves composted at the Macoskey Center), and by sponsoring a free community E-Waste collection day each year.

## **PILLAR I: REDUCED ENVIRONMENTAL IMPACT AND COSTS**

*Under each appropriate element, describe how your college or university is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and using alternative transportation. Identify your institution’s energy-efficient facilities and practices, ecologically beneficial uses of grounds, and methods of disposal for solid and hazardous wastes. It may be helpful to use the bullets listed below as a guide.*

### **Element IA: Energy conservation and efficiency, and reduction in greenhouse gas**

*Provide a narrative (1,500 words max) of how your institution has promoted energy conservation and improved energy efficiency, as well as reduced greenhouse gas (GHG) emissions.*

- *Have you received the U.S. Environmental Protection Agency’s ENERGY STAR certification? If so, in what year was the certification earned?*
- *Are you currently tracking your institution’s energy use in a tool such as ENERGY STAR Portfolio Manager? If so, what tool and for how long?*
- *Do you have an energy management plan in place at your college or university?*
- *How has the college/university reduced its total non-transportation energy use (i.e., electricity, lighting and heating/cooling) from an initial baseline?*
- *Provide your percentage reduction measurement unit used (kBtu/sf, kBtu/student, or annual therms). Include time period and how documented.*
- *Are there any student-led energy saving campaigns in place?*
- *Is a purchasing and procurement policy for energy efficient products in place?*
- *Are there occupancy sensors or daylight harvesting controls in the building(s)?*
- *What percentage of your energy consumption comes from on-site renewable energy (solar, wind, biomass, etc.) generation or purchased renewable energy?*
- *Can your institution demonstrate a reduction in greenhouse gas emissions? What is the percentage of reduction and the time period of reduction? How is it documented?*



SRU received Silver Certification for our 2014 ASSHE STARS Report, which includes comprehensive reporting on all elements of sustainability (energy and water use, recycling and waste minimization, sustainable curricular and co-curricular activities, GHG emissions, etc.) practiced by the University.

We have been tracking our energy use since before 2004 using a reporting system provided by the Penn State Facilities Engineering Institute (“PSFEI”, under contract with PASSHE, the Pennsylvania State System of Education). This report allows us to benchmark our energy and water use with similar institutions within the PASSHE system.

Our energy management plan is incorporated within our Climate Action Plan, which includes 30+ specific programs, projects and strategies aimed at reducing our energy consumption and greenhouse gas emissions. Progress against this plan is monitored by means of our Annual Utility Usage Report data, which is entered into the Clean Air, Cool Planet Campus Carbon Calculator for tracking progress against our GHG emissions goals. Included in the Climate Action Plan are projects such as solar photovoltaic canopies over our existing commuter parking lots, conversion of our coal-fired boilers to a biomass system using renewable wood, energy audits and re-commissioning of all buildings on campus, converting our existing site lighting to individually-controlled LED light fixtures, behavioral change programs to encourage sustainable living, and additional conservation/waste minimization projects. SRU also participates in an electrical demand response program with the local electricity provider, saving money for SRU and assisting the utility provider to meet peak loads while minimizing the need for additional power plant capacity. In FY 2015, SRU saved \$96,200 through the demand response program by reducing our peak demand by 2,330 kW.

SRU’s Facilities Department has worked diligently for many years to conserve energy and improve energy efficiency in our physical campus facilities, including a multi-year program of replacing sections of our underground steam distribution piping to improve the energy performance of our central heating plant and reduce our boiler water makeup requirements. In addition, SRU has participated in two ESCO programs to make our existing buildings more energy- and water-efficient through the installation of low-flow water fixtures, window replacements, and lighting retrofits (and are currently in the process of developing a third ESCO program).

In 2009, SRU adopted a policy of meeting LEED standards for new buildings and major renovations, greatly improving the energy performance of recently constructed dormitories and the new Smith Student Center. Our Energy Conservation Committee developed our first Energy Conservation Policy in 2011, which includes thermostat set point standardization, smart classroom scheduling, reduced space heater use, an EnergyStar product procurement policy, and increased user responsibility. At the same time SRU launched the Energy Action Campaign “Small steps. Big payoff.” with an online Pledge to increase awareness of wasteful energy practices and affect behavioral change by having students commit to adopting at least three energy-saving habits.

Our Office of Sustainability coordinates and supports our sustainability initiatives, and actively promotes energy-conserving behavior through our website and social media outreach. Part of our outreach program includes randomly selecting students who have taken the energy pledge or are “following” us on Facebook, Twitter and Instagram to receive small prizes such as carabineer clips, reusable water bottles, and energy pledge T-shirts.

We have achieved a 22% reduction in energy use since our base year 2005, despite our campus facilities area increasing by 32% during this period. Our building energy utilization index has been reduced by 41%, from 190,806 BTU/GSF-year in 2005 to 112,302 BTU/GSF-Year in FY 2015); this data is reported annually in the PSFEI’s annual Utility Usage Report issued for all PASSHE universities, as well as in our ASSHE STARS Report (updated bi-annually) and our annual GHG Emissions Inventory, both of which are available for public viewing on the ASSHE website.

SRU’s students are represented on the President’s Commission on Sustainability and the Energy Conservation Committee, and are regularly engaged in energy-saving campaigns. Student volunteers and workers take the lead in promoting our “Small steps. Big payoff.” Energy Pledge campaign by staffing sustainability tables during the “Week of Welcome” activities, and by staffing the energy education stations/games at the annual “Earth Week Carnival in the Quad”.

Other examples of student-led conservation projects include students from an Environmental Problems class who performed lighting surveys of two academic buildings and the football stadium, which led to additional lighting controls being installed at the football stadium and changes being made to how the custodial staff control off-hour lighting in the academic buildings.



Another student-led energy saving campaign is the Sustainable Enterprise Accelerator “Sustainable Department” self-certification program, which was developed by student interns and is now being piloted to encourage all faculty, staff and students in a given academic department to save energy and adopt other sustainable practices.

SRU has a purchasing and procurement policy for energy efficient products in effect; our Energy Conservation Policy mandates that all new personal appliances and energy-using devices be EnergyStar models if available, and that any existing appliance be replaced with an EnergyStar model at the end of its useful service life. Our Information Technology department also has a policy of purchasing only EPEAT-certified computer products.

Occupancy sensors are used extensively throughout campus, with daylight harvesting controls provided where economically justified.

Approximately 25 percent of our purchased electricity (7,500,000 kwh/year) is provided via purchased Renewable Energy Credits and on-site renewable energy projects demonstrating several solar photovoltaic systems and a woodburning system (located at the Harmony House, using renewable tree-trimming wood collected by our grounds crew).

In 2009 SRU’s president signed the American College and University Presidents’ Climate Commitment, setting us on a path to broaden our reach and engage our entire campus/community in helping to reduce our reliance on fossil fuels, reduce our greenhouse gas emissions, and expand curricular/non-curricular opportunities for sustainability education. We track our progress toward our goal of achieving carbon neutrality by 2037 by completing greenhouse gas emissions inventories each year (using the Clean Air, Cool Planet Campus Carbon Calculator). We have documented a reduction of 8,876 MTeCO<sub>2</sub> in GHG emissions (over 18%) since our base year 2005, despite our campus facilities area increasing by 32% during this period. Our GHG Emissions Inventories since 2005 are documented on the ASSHE website and viewable by the public (our Climate Action Plan, STARS Report, and GHG Inventories can all be viewed by simply clicking on links on SRU’s sustainability website landing page, [www.sru.edu/sustainability](http://www.sru.edu/sustainability)).

***Element 1B: Improved water quality, efficiency, and conservation***

*Provide a narrative (500 words max) of how your college or university is progressing toward water conservation.*

- *Do your facilities have low flow fixtures (e.g., faucets, toilets, sinks)?*
- *Can the college/university demonstrate a reduction in total water consumption intensity (measured in gallons/square foot or gallons/occupant) from an initial baseline?*
- *Do you conduct audits of facilities and irrigation systems to make sure they are free of significant water leaks and to identify opportunities for savings?*
- *Do all outdoor landscapes consist of water-efficient or regionally appropriate plants (native species and/or adapted species)?*
- *Does your institution use a smart irrigation system that adjusts watering time based on weather conditions?*
- *Has your college or university implemented storm water best management practices and/or low-impact development strategies (i.e., rain gardens, vegetated swales, pervious paving, rainwater harvesting, green roofs)?*
- *Does your institution use non-potable water sources, such as rainwater or greywater (i.e., water from sinks or kitchens), for irrigation or toilet flushing?*
- *If you use drinking water from a well, how is the water source protected from potential contaminants?*
- *Do you have a program in place to control lead in drinking water, including voluntary testing and measures to reduce lead exposure in drinking water)?*
- *Are all taps, faucets and fountains used for drinking and cooking cleaned on a regular basis to reduce possible bacterial and other contamination? Are faucet screens and aerators regularly cleaned to remove particulate lead deposits?*
- *Is an area of the campus devoted to ecologically or socially beneficial uses, including those that give consideration to native wildlife (such as campus/community vegetable garden, wildlife or native wildlife habitat, outdoor classroom, running/walking trails, environmental restoration project, etc.)?*
- *Describe other ways you are working to improve water quality, efficiency and conservation.*

Almost all of SRU’s buildings use low-flow water faucets, toilets and sinks (through either a 2009 ESCO retrofit program for existing buildings or the design/construction of newer LEED certified facilities).



Campus water use has been reduced from a high of 60,184,000 gallons in 2009 (6,504 gallons/occupant) to 49,019,000 in 2015 (5,150 gallons/occupant).

Facilities and irrigation system audits were conducted during the 2009 ESCO program, and the two athletic field irrigation systems using potable water are inspected for leaks annually. Water bills are also analyzed to identify potential leaks, and building occupants can submit online work order requests to our Facilities Department to request action on any water leaks observed.

Native and adapted species plants have been used at recent LEED certified buildings, and all plantings on campus use local plants that do not require regular watering.

With the exception of two varsity athletic fields and a limited number of “waterless” planters on campus that use potable water, all irrigation water is provided by local wells or harvested rainwater. The Assistant Director for Campus Services manually controls the timing and extent of irrigation provided for the two athletic fields.

SRU uses stormwater best management practices, including a campus stormwater retention system using a series of connected streams and retention ponds to minimize stormwater overflow. The Smith Student Center West Parking Lot features a stormwater vegetated bio swale, pervious pavement, and three bioretention rain gardens to minimize soil erosion and silt run-off.

In addition, green roofs are in use at the Smith Student Center, Dinger Special Education building, the Macoskey Center springhouse, and one bus shelter. Rainwater harvesting systems are also in use at the Smith Student Center and the Macoskey Center barn, where it is used for watering the nearby community gardens.

A rainwater collection and drip irrigation system is used in the Smith Student Center East Parking Lot planter area, and both rainwater harvesting and a residential scale greywater system are used at the Macoskey Center’s Harmony House.

No drinking water on campus is provided from wells. All potable water at SRU is provided by the local municipal water treatment plant, which is responsible for water quality testing.

Custodial staff regularly cleans all taps, faucets and fountains used for drinking on a regular basis to reduce potential bacteria and contamination. Water from faucets used for cooking is cleaned by our food services vendor, AVI, in accordance with all laws, ordinances, and regulations and we conduct legionella preventive maintenance testing/treatment in residence halls annually.

SRU’s campus includes over 150 acres of protected Audubon Society sanctuaries, riparian buffer zones, campus and community organic vegetable gardens, a community windrow composting area, several outdoor classroom areas, two biology/ecology test plots, and interpretive nature hiking trails. Student volunteers recently constructed causeways along the Overlook hiking trail to protect nearby wetlands.

Our Energy Action Campaign Energy Pledge also encourages water conservation steps such as taking shorter showers, and we are also exploring the feasibility of using on-campus wellwater for the boiler makeup water system.

***Element 1C: Reduced waste production, improved recycling, and composting programs***

*Provide a narrative (500 words max) of how your institution diverts solid waste from landfills and incinerators by reusing, recycling, and/or composting. Include a description of how you dispose of hazardous waste.*

***Municipal Solid Waste***

- *What percentage of waste is diverted from the landfill or incinerator by reuse, composting and/or recycling?*
- *Does your institution have a yard and/or food waste composting system?*
- *Are you using post-consumer recycled products or wood products certified by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard when possible?*
- *Are procurement policies in place to encourage the purchase of recycled content materials, supplies or furniture?*
- *Are other waste reduction programs in place?*



### **Hazardous Waste**

- *How much hazardous waste do you generate (pounds/person/year)? How is it disposed?*
- *Is there a Hazardous Waste Policy in place and actively enforced for storage, management and disposal of chemicals, and hazardous waste in laboratories and other areas?*
- *What percentage of total computer purchases are Electronic Product Environmental Assessment Tool (EPEAT) certified products? How do you dispose of unwanted computer and other electronic products?*
- *Do you use certified "green" cleaning products that meet the environmental standards of established eco-label programs (e.g., Green Seal, Ecologo, etc.)?*
- *Is your custodial program certified to the Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard – Green Building, or an equivalent standard?*
- *What other indicators show that you are reducing waste and eliminating hazardous waste?*

39% of SRU's landfill waste was diverted from landfill in 2014. Landfill waste has been reduced from 857 tons (200 lbs./occupant) in 2005 to 629 tons (132 lbs./occupant) in 2015, a 27% reduction.

SRU collects approximately 54 tons of food scraps and leaves each year, and composts it at the Macoskey Center windrow.

The Macoskey Center Harmony House is a reclaimed homestead that uses post-consumer recycled products (old farm implements refashioned by a local blacksmith into hardware for the kitchen cupboards, kitchen countertops made from post-consumer pressed paper, a reclaimed kitchen table, and old barn wood that has been reused to create an outdoor bench and several birdhouses.

SRU procurement policies require the use of 30% recycled content copy paper and other recycled products and supplies. In 2014, 98.5% of our total paper expenditures were for 30% or greater recycled content paper.

In 2011 SRU limited free student printing to 500 pages per semester, and removed 450 faculty desktop inkjet printers to encourage use of more efficient multifunction department equipment. These steps reduced printing by 5.5 million sheets of paper per year and the associated reduction in ink and toner. Savings from these items is estimated at over \$150,000 per year. Our School of Business has outlawed the printing of syllabuses; unneeded furniture/materials are auctioned off to the public regularly, and a student-led "Dump & Run" program collects unwanted student furniture at the end of Spring semester for donation to local charities.

SRU generates approximately 2,000 pounds of hazardous waste per year. Disposal is through contract with a licensed hazardous waste disposal firm.

SRU's EH&S Department manages and enforces programs dealing with both hazardous chemicals and hazardous waste. A Chemical Hygiene Plan and an associated document Practices for Proper Chemical Use and Storage are used to identify means and methods to properly use and store hazardous chemicals. SRU also developed and implemented a Hazardous Waste Management Program comprised of procedures that identify means and methods to properly identify, categorize, label, store and dispose of hazardous waste materials.

100% of our total computer purchases are EPEAT certified products, and all unwanted/obsolete electronic products are recycled by our EH&S Department through a certified vendor.

SRU guidelines require the purchase of green seal certified products for the chemicals we use for daily custodial cleaning procedures (e.g., glass and window cleaner, floor cleaners, bathroom and general purpose cleaners).

A Green Seal Certified Hand Soap system was put in place campus-wide in January 2014. The Assistant Director of Campus Services oversees the Green Cleaning program, and only Custodial Supervisors are allowed to purchase cleaning products for staff use. In 2014, approximately \$70,000 out of a total cleaning supplies budget of \$73,000 was used for Green Seal cleaning and janitorial products.



In addition to recycling all obsolete computer equipment, the EH&S department recycles other items containing hazardous materials (fluorescent lamps and ballasts, batteries, etc.). Our recycling efforts have increased from 230 tons in 2010 to 343 tons in 2015, a 49% increase in 5 years.

**Element 1D: Use of alternative transportation**

*Provide a narrative (500 words max) of how your college or university is promoting alternative transportation, utilizing alternative fuels, and/or upgrading current modes of transportation.*

- *Does your institution offer well-kept campus-wide bike paths, appropriate locking facilities for bikes and promote biking as an alternative method of transportation to driving?*
- *Do you have a no-idling policy on file and signs posted stating that all vehicles, including campus buses, are to limit idling on campus premises?*
- *Are all vehicle loading and unloading areas at least 25 feet away from all buildings' air intakes (including doors and windows)?*
- *Describe how your institution's transportation fleet reduces environmental impacts (e.g. percentage of electric/hybrid/alternative fuel vehicles, idle reduction equipment, bus route revised to reduce fuel usage/emissions).*

The Overlook Trail is a well-maintained hiking/biking path that runs through woodlands the entire length of SRU's campus. SRU promotes the use of biking as an alternative method of transportation through a variety of methods, including a free "green bike" loaner program, two free bike repair stations accessible to the general public, exterior bike racks at all major buildings, and personal bicycle hanging racks in many of the New Residence Hall rooms.

A no-idling policy for all University vehicles was added to our Energy Conservation Policy in 2013, and a related signage program has been approved for implementation this year.

In general, vehicle loading and unloading areas are at least 25 feet away from building outside air intakes, doors and windows. For those few older buildings (Bailey Library, Spotts World Cultures Building, and Eisenberg Classroom Building) where this is not the case, "No Idling" signs are in the process of being created and posted to minimize the impact of delivery truck exhaust intrusion into the buildings.

One of SRU's sustainability goals in our strategic plan is to "encourage reduction of fossil fuels used in the motor pool by moving to alternative energy sources as they develop." Positive outcomes from implementing this include a demonstration program that creates biodiesel from used cooking oil and the purchase of three electric utility vehicles by our maintenance and grounds crews.

SRU's Student Government Association also funds free on- and off-campus bus transportation for students in an effort to reduce the use of single-occupancy vehicles. To make using the bus easier and thereby reducing our carbon footprint, a Green Fund Grant provided SGA with 50% matching funds to add a computer GPS tracking system that allows riders to use cell phones to track where a bus is and its estimated time of arrival.

**PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS, FACULTY, AND STAFF**

*Under each appropriate element, describe how your college or university improves the health and wellness of students, faculty and staff by integrating a campus-wide environmental health program and promoting sound health and wellness practices. Address the amount and type of outdoor time that your students and staff have, as well as the types of fresh, local, and organic food that they eat. Other components you may want to include are: health education, health services, counseling, psychological and social services, staff health promotion and community involvement. It may be helpful to use the bullets listed below as a guide.*

**Element 2A: Integrated campus environmental health program**

*Provide a narrative (1,500 words max) of how your college or university is improving the quality of health for students, faculty and staff. Keep in mind that an integrated campus environmental health program is based on an operations and facility-wide environmental management system that considers student and staff health and safety in all practices related to design, construction, renovation, operations and maintenance of buildings and grounds.*

**Integrated Pest Management**

- *Do you have an integrated pest management plan in effect to reduce or eliminate pesticides?*



- *Do you follow posting guidelines regarding the application of pesticides and herbicides? Do you notify students and campus employees about methods of application?*
- *Do you maintain annual summaries of pesticide applications, copies of pesticide labels, copies of notices and Material Safety Data Sheets (MSDSs) in an accessible location?*
- *Do you prohibit students/staff from entering a treated area for at least eight hours following the application or longer if required by the pesticide label?*

#### **Ventilation**

- *Does your institution meet ASHRAE Standard 62.1-2010 (Ventilation for Acceptable Indoor Air Quality)?*
- *Are local exhaust systems (including dust collection systems, paint booths and/or fume hoods) installed at all major airborne contaminant sources, including science labs, copy/printing facilities and chemical storage rooms?*
- *Have you installed energy recovery ventilation systems, where feasible, to bring in fresh air while recovering the heating or cooling from the conditioned air?*

#### **Contaminant Controls**

- *Radon: Have all ground-contact classrooms been tested for radon within the past 24 months?*
- *Carbon Monoxide: If you have combustion appliances, do you have an inventory of all combustion appliances and annually inspect these appliances?*
- *Mercury: Has your institution eliminated mercury containing thermometers, elemental mercury, chemical compounds, art chemicals, etc.?*
- *Do you recycle or dispose of unwanted laboratory chemicals, mercury thermometers, gauges and other devices in accordance with federal, state and local environmental regulations?*
- *Chromated Copper Arsenate: Have you replaced or sealed wooden decks, stairs, playground/exercise equipment or other structures treated with Chromated Copper Arsenate within the past 12 months? What percentage?*
- *Secondhand Tobacco Smoke: Do you prohibit smoking on campus?*
- *Asthma Control: Do you have an asthma management program in place?*
- *Indoor Air Quality (IAQ): Do you have a comprehensive indoor air quality management program?*
- *Moisture Control: Are all structures visually inspected on a regular basis to ensure they are free of mold, moisture and water leakage?*
- *Describe any other measures regarding the institution's built and natural environment that you take to protect student, faculty and staff health.*

All areas of campus are managed using an Integrated Pest Management Plan, which emphasizes integrating interior and exterior strategies while employing non-chemical practices. The Macoskey Center Harmony House property is also managed in accordance LEED for Existing Buildings - Operations & Maintenance certification and includes both a landscape management program and an IPM plan.

Posting guidelines included in the PA Registry are followed in notifying faculty, staff and students of methods of application for any pesticides or herbicides used.

Annual summaries of pesticide applications, including their labels, MSDS and related information, are maintained at the EH&S Department offices and available for inspection.

Faculty/staff/students are prohibited from entering treated areas for at least 8 hours (or longer, if required on the pesticide label) after application.

ASHRAE Standard 62.1-2010 ventilation standards are met for all recently renovated and newly-constructed facilities, as part of our policy of meeting LEED standards for all new buildings and major renovations. Re-commissioning of all major building systems is included in our Climate Action Plan, as well as the current ESCO program RFP, so the performance of older facilities' ventilation systems will be checked and upgraded as needed.

Local exhaust systems are used at all major airborne contaminant sources, including dust collection systems, paint booths and copying/printing facilities.



Energy recovery ventilation systems are typically installed wherever feasible and are provided at all of the New Residence Halls, science labs at the Vincent Science Center and Advanced Technology and Science Hall, Boozel Dining Hall, and the new Smith Student Center.

Radon tests of SRU facilities have been conducted in the past, but not within the past 24 months.

Because SRU maintains a central heating plant, very few combustion appliances exist on campus (with the exception of domestic water heaters in the Rock Apartments, which are located outside of the apartments in a mechanical room, and gas boilers in the Residence Hall F mechanical room. These are inspected annually by Labor and Industry personnel.

SRU's EH&S Department has been phasing out the use of mercury and other chemical compounds wherever feasible, including replacing toxic chemicals with safer, more environmentally friendly supplies used in our Art Department.

All chemicals, thermometers and other devices containing hazardous materials (including electronic or "universal" waste) are recycled or disposed of by our EH&S Department, in accordance with federal, state and local environmental regulations.

An aging wooden "jungle gym" located at the Old Thompson Field was removed and replaced in 2015 with a new, non-chromated copper arsenate outdoor fitness station. This represents perhaps 5% of the few treated wooden decks/structures on campus.

Tobacco smoking is prohibited in all SRU buildings and within 25 feet of building entrances/outside air intakes, and signs have been installed to notify the public of these policies.

The Student Health Services provides asthma management services to SRU students. Students can access a Registered Nurse 24/7 during the academic year for an evaluation; a nebulizer and rescue inhalers are available on site. Students also have the option to call the Student Health Services for van transportation if a situation makes it difficult to walk to the Student Health Services.

SRU's indoor air quality management program begins with meeting LEED standards for construction phase IAQ management for all new buildings and major renovations. Where appropriate (e.g., large conference spaces in the Smith Student Center), carbon dioxide monitoring systems are employed in new buildings/renovations to ensure adequate levels of ventilation are maintained. Our in-house EH&S and Zone Maintenance Supervisors, who are responsible for maintaining specific buildings and therefore familiar with the occupants and their concerns, respond to any work order requests by building occupants to address IAQ concerns. SRU's EH&S Department also includes certified asbestos technicians that identify and remediate any existing asbestos at risk of being disturbed by ongoing renovations.

Zone Maintenance Supervisors regularly inspect their buildings for water leakage, moisture infiltration and mold, address occupant concerns, and call in EH&S personnel as needed to assess the situation and recommend remedial action.

All faculty, staff and students can request Facilities and EH&S Department assistance with any air quality or moisture control issue identified through our online Work Order system.

A \$4 million central heating plant baghouse was installed to reduce particulate emissions affecting local air quality from the use of coal as a heating fuel. In addition, the amount of coal burned in the central plant was reduced by 71% in FY 2015 (on an mmBtu/year basis, compared to our base year of 2005) due to the addition of gas co-firing capability and increased use of natural gas.

### ***Element 2B: Health and wellness***

*Provide a narrative (800 words max) of how your college or university is improving the physical and mental health of students, faculty and staff.*

#### ***Fitness and Outdoor Time***

- *What is the average amount of time over the past year that each student engages in campus-provided physical activity?*



- Describe any other outdoor exercise opportunities and nature-based recreation available on campus.

### **Food**

- What percentage of food purchased is certified as environmentally preferable (e.g., Organic, Fair Trade, Food Alliance, Rainforest Alliance, etc.)?
- What percentage of food purchased is grown and processed locally, including food grown on campus grounds?
- Does the college/university have an onsite garden from which campus meals are made?

### **Ultraviolet (UV) Safety**

- Does your institution provide any information on sun and UV radiation safety?
- Does your institution have in place a UV Index alert system for campus students and employees?

### **Mental Health**

- Does your institution use a coordinated approach or other related initiatives to address overall campus health issues?
- Does your institution partner with any businesses, nonprofit organizations, or community groups to support student health and/or safety?
- Describe your college or university's efforts to support student mental health and school climate (e.g. hotline programs, peer counseling, etc.).

The American College Health Association - National College Health Assessment survey data results for spring 2013 are as follows:

- Do moderate-intensity cardio or aerobic exercise for at least 30 minutes:
  - 0 days 15.8 %
  - 1-4 days 53.7%
  - 5-7 days 30.5%
- Do vigorous-intensity cardio or aerobic for at least 20 minutes:
  - 0 days 29.1%
  - 1-2 days 31.2%
  - 3-7 days 39.7%

SRU's outdoor exercise opportunities available on campus include seven intramural sport fields, a dek hockey/basketball court, an 18-hole disc golf course, tennis courts, and a campground with ski lodge, ski slope and 18 campsites. An outdoor fitness station installed is also free to faculty, staff, students, and the general public.

Additional informal/nature-based outdoor exercise opportunities include hiking/biking the Overlook Trail and two nature hiking trails at the Macoskey Center.

The following clinics are also offered once per year to introduce faculty and staff to outdoor activities that provide physical, social and environment wellness opportunities: Snowshoeing, Cross Country Skiing, Disc Golf, Nordic Walking, and Introduction to Overlook Trail. A Day of Play event is also held once per year in the Quad, where games associated with leisure and socialization are introduced along with signs that describe the evidence- based benefits of Play.

A Dining Services dietician provides monthly nutrition education programs and educational sessions for clubs and organizations, and participates in campus events such as Healthfest. Nutrition information is provided on the Dining Services web site, brochures, on a nutrition kiosk and several electronic menu boards in the dining hall, along with service line icons to identify healthy food options. Dining Services also addresses the needs of students with food allergies and medical conditions through a separate service line featuring soy-based, gluten-free, low-fat and low- and sugar-free products. Many healthy choice and local food options are available on a daily basis, and we incorporate the concept of "stealth health" by using whole grain products.

100% of all coffee is fair trade/organic.

38% of all food purchased is within a 150 mile radius, and 46 percent is purchased within a 250 mile radius of SRU's campus.



The culinary staff grows a small herb and vegetable garden behind Boozel Dining Hall, and Dining Services also purchases vegetables, herbs, and eggs from the on-campus Macoskey Center organic garden and cage-free chickens when available.

SRU does not have a UV Index alert system in place, but Student Health Services, through the HOPE peer educators, provides sun safety education to student organizations and Residence Life, and staff sun safety booths prior to spring break that normally reach 250 – 500 students.

SRU uses a coordinated approach to address overall campus health issues, from primary prevention to intervention options. The President's Commission for Wellness facilitates/coordinates initiatives that promote awareness of wellness and empower individuals to make choices and enact behaviors that positively influence their wellness. The commission touches on physical, emotional, spiritual, social, environmental and occupational wellness in working with the many departments that provide wellness services for students, including Student Health Services, the Student Counseling Center, Student Intervention Services, Residence Life, University Police, Title IX Task Force, the Behavioral Intervention Team, the Slippery Rock Alcohol and Addictions Coalition, Women's Center, Pride Center, Office of Disability, Multicultural Office Campus Recreation, Retention Services and Center for Student Involvement and Leadership.

Student organizations such as HOPE (Healthy Outreach Through Peer Education) Peer Education, Active Minds, Colleges Against Cancer, Pennsylvania Public Health Association – Collegiate Chapter also provide wellness education to students. The Title IX Education Task Force also works as a collaborative group to provide appropriate education and resources to students about sexual violence and sexual misconduct.

SRU collaborates with local hospitals, the PA Department of Health, Center for Community Resources, VOICe (Victim Outreach Intervention Center) and Adagio Health. SRU University Police officers are available 24/7, and partner with Borough and State Police to address safety concerns off campus. Immediate access to police is provided by Blue Light Safety Stations located throughout campus and Safety Call Boxes located in all academic buildings.

SafeWise, a safety and home security company that researches college campus safety, ranked SRU #11 among the nation's safest college towns in 2015.

Students of concern, or in need, can be reported to one central location, the Office of Student Intervention Services through an on-line form or by phone.

A Registered Nurse is available 24/7 during the academic year to coordinate crisis response. Student Intervention Services, Student Health Services and the Student Counseling Center are all available to provide services to students with mental health issues. Active Minds, a student organization, empowers students to change the perception about mental health on college campuses. HOPE peer educators also provide mental health promotion services such as the "Resilience Boot Camp."

### **PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

*Under each appropriate element, describe how your college or university provides effective environmental and sustainability education by incorporating STEM, civic skills, and green career pathways. It may be helpful to use the bullets listed below as a guide.*

#### **Element 3A: Interdisciplinary learning**

*Provide a narrative (1,500 words max) about how your college or university incorporates and teaches key relationships between dynamic environmental, energy and human systems.*

- *Does your college or university have any program graduation requirements for environmental or sustainability literacy?*
- *How are environmental and sustainability concepts integrated throughout the curriculum?*
- *Are professional development opportunities in environmental and sustainability education available to all faculty and staff at least every other year?*
- *Does your focus on environmental and sustainability literacy pay particular attention to scientific practices, such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting*



*data, using mathematics and computational thinking, constructing explanations and engaging in argument, and applications based on evidence?*

- *Do your students have meaningful outdoor experiences (an investigative or experiential project that engages students in critical thinking, problem solving and decision-making)?*
- *How are the sustainable elements of your building used as an educational opportunity?*

SRU does not yet have PASSHE-approved, formal program graduation requirements for environmental or sustainability literacy, but is working toward the goal of making sure all graduates are literate in these areas.

Some of the action steps outlined in the University's Strategic Plan that will help us achieve this goal include:

- Increase the number of sustainability components within goal courses in the Liberal Studies Program
- Develop Sustainable Living Learning communities within the residential halls
- Engage students in sustainability projects on campus and in the surrounding communities
- Increase faculty and staff awareness and participation in sustainability projects through various dissemination efforts, including web pages, informational pieces, etc.

We have been making great strides in these and other related action steps, and will continue expanding the number of curricular and co-curricular environmental/sustainability activities available to our students.

Environmental and sustainability concepts are integrated throughout the curriculum in a variety of ways, including:

- Including sustainability and energy classes in the FYRST (First Year Studies) program;
- Providing class tours, led by a LEED accredited professional, of our LEED facilities to explain the sustainability concepts that were applied to earn LEED certification;
- Providing class tours, led by peer educators, of the Macoskey Center for Sustainability Research and Education to demonstrate the wide variety of energy conservation, alternative energy, and sustainability demonstration projects on display there;
- Using Office of Sustainability staff to guest lecture at classes regarding climate change realities, SRU's energy and sustainability goals, and our progress toward achieving those goals;
- Developing a Campus Sustainability Features Map, which locates and explains the benefits of sustainable features on campus (such as LEED buildings, Audubon sanctuaries, green roofs, rain gardens, photovoltaic systems, wind turbines and permeable pavement). Originally developed for use on our sustainability website and for SRU Admissions Tours, we are currently planning to make this informational available via a smartphone app for use in various informal and formal outdoor classroom activities.
- Using a "Sustainable Department" self-certification program (developed by student interns at the School of Business' Sustainable Enterprise Accelerator) raise awareness about sustainability concepts among each academic departments' faculty, staff and students and promote more integration of such concepts into their curriculum.

Professional development opportunities are available to faculty and staff every year through a variety of programs, including an on-campus Professional Development Day open to all faculty and staff. This program often focuses on generally applicable topics (like high impact educational practices) that can be applied to all types of education, including environmental and sustainability education. In addition, professional development opportunities in environmental and sustainability education, in the form of sustainability conference registration fees and expenses, are available each semester through Green Fund Grants and the Office of Sustainability's budget.

SRU's focus on environmental and sustainability literacy clearly relies on scientific methods, models, mathematics and evidence-based data analysis in many class curricula. One of SRU's College of Health, Environment and Science's primary goals is "to provide an environment where students will graduate as life-long learners, able to make ethical evidence-based decisions that consider the welfare of the greater good". Similarly, the Geography, Geology and Environment Department's learning outcomes include "Each graduate shall possess and apply critical thinking and problem solving skills" and "Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures". Learning outcomes for the Parks and Recreation program include "Professional Decision Making (Problem Solving) - To demonstrate critical thinking and problem solving by making decisions based on the critical assessment and integration of multiple perspectives, the best available science and historical perspective".



Many of our upper division environmental classes (Quantitative Methods, Water Quality, Air Quality, Paleontology, etc.) involve research components that provide opportunities for our students to build critical thinking and problem solving skills based on applying scientific principles and investigative techniques.

Systems models are used in the Principals of Sustainability course, models and data analysis of oil spills carried by ocean currents are used in Oceanography courses, and GIS courses often involve plotting, analyzing and interpreting environmental data.

SRU's faculty makes use of outdoor classrooms on campus, including 150 acres of Audubon Society Sanctuaries, interpretive nature hiking and equestrian trails, and our Biology department in particular uses two biology/ecology plots near the Macoskey Center as an outdoor classroom. The Overlook hiking trail was recently provided with causeways protecting wetland areas, constructed by student volunteers who had to research appropriate solutions considering the resources available to them and the educational value of the project.

Immersive, sustainability-focused educational study programs are offered to graduate assistants, student workers and student volunteers at the 71 acre Robert A. Macoskey Center for Sustainable Systems Education and Research, where they can gain hands-on experience in a wide variety of environmental/sustainability concepts including alternative energy projects, organic gardening and permaculture techniques, composting, energy conservation, environmental education, etc. Critical thinking, problem solving and decision-making skills are all brought into play when planning truly sustainable projects that are then implemented at the Center. The current aquaponics project, designed and constructed by interns and volunteers of the Sustainable Enterprise Accelerator, provided a great opportunity for students to apply critical thinking, problem-solving, and decision-making skills in creating a practical solution that can be replicated in a small village in Ghana to provide healthy, sustainable cash crops – tilapia and swiss chard – for the villager

The head of SRU's Office of Sustainability is an architectural engineer and LEED accredited professional, who provides guest lectures and tours of our LEED certified buildings for classes in sustainability-related programs. The Campus Sustainable Features Map, which can be downloaded from our website, is also used to illustrate and describe the benefits of sustainable features on campus, including green roofs, rain gardens, bioswales and pervious pavement related to our buildings.

At Boozel Dining Hall, the amount of food waste avoided and water/dishwashing chemicals saved as a result of trayless dining is also communicated to the students via posters and brochures.

***Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills***

*Provide a narrative (800 words max) of how your college or university is utilizing the environment and sustainability to improve STEM knowledge and problem-solving skills.*

- *Does your general science curriculum include a deep understanding and connections of life, physical and earth sciences?*
- *Does your curriculum provide connections between classroom content and career readiness, particularly to options that focus specifically on environmental and sustainability fields and studies?*

SRU's general science curriculum includes providing students with a deep understanding of, and connections with the life, physical and earth sciences. For example, the B.S. in Biology program includes ecology course components, and the Chemistry Department offers an Environmental Chemistry program designed to introduce students to all aspects of the environmental field while also providing a strong background in chemistry (in addition to the standard advanced chemistry courses, students take a variety of upper level environmental courses such as Air and Water Quality Assessment and Geochemistry).

Examples of other learning outcomes illustrating a deep understanding of or connections among life, physical and earth sciences include our Geology and Environmental Science program's outcome of "Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere".



SRU's curriculum does provide strong connections between classroom content and career readiness in environmental and sustainability fields of study. For example, the School of Business offers courses such as "Sustainable Entrepreneurship and Innovation" and "Sustainable Business Consulting". Through its affiliated Sustainable Enterprise Accelerator program, it also provides many student internships with local businesses interested in improving the sustainability of their operations.

The Bachelor of Science in Resort Recreation and Hospitality Management program also specifically prepares students for careers in the hospitality and tourism field, and includes course components in eco-tourism. A strong curriculum is provided with courses in sustainable hospitality and planning, ecotourism, event programming and leadership, meeting and event planning, and resort and hotel management. The culminating experience in the program is a 12 week internship at a hospitality or tourism related agency. Internships are available at resorts, hotels, cruise lines, community/municipal recreation centers among others. Faculty members work with students to find appropriate agencies to match with their career goals.

***Element 3C: Development and application of civic knowledge and skills***

*Provide a narrative (500 words max) on how your institution is improving civic and community partnerships toward sustainability.*

***Community and Civic Engagement***

- *Do you partner with local academic, businesses, government, nonprofits, informal science institutions and/or other schools to help advance the institution and community toward sustainability and other environmental issues?*
- *Does your college or university host campus or community-based events that promote and educate on sustainability?*
- *Do you have outdoor classrooms on your grounds that include native plantings or a community garden? If yes, how do you use them to teach an array of subjects in context, engage the broader community and develop civic skills?*
- *What are other indicators or benchmarks of your progress toward the goal of 100 percent of your graduates being environmentally and sustainability literate?*

SRU partners with a variety of local high schools and nonprofits, including the local Rotary Club, the Bartramian Audubon Society, Sustainable Slippy Rock, the Slippy Rock Community Farmers Market, Jennings Environmental Center, the Smithsonian Institute, Economics PA, and many local businesses.

We host many campus and community-based events that promote and educate on sustainability, including (but not limited to) the following:

- Earth Week at Slippy Rock is a multiple-week event open to the public and focused on promoting a healthy and sustainable environment. Activities include an Earth Week "Carnival on the Quad" in which prizes can be won by students engaging in a variety of environmental/sustainability-focused educational games; an Earth Week Festival at the Macoskey Center, volunteer opportunities for cleaning up highways, streams, and invasive species encroaching on the nearby Jennings Environmental Center; a series of sustainable educational films, and guest speakers on energy, sustainable education, and environmental topics. In 2013, over 1,000 students participated in 33 different activities.
- The Sustainable Enterprise Accelerator student interns work on multiple projects designed to assist local entrepreneurs and businesses improve the sustainability of their operations. They also host a monthly meeting of the Slow Foods Club at which local vendors of organic products share food products and educate attendees on the benefits of eating fresh, local and organic foods.
- In June of 2016, SRU will be hosting a "Healthy Planet, Healthy People" environmental education summer camp for high school students from 20 school districts. Supported by an EPA grant and our nonprofit partner in sustainability education, Economics PA, the camp will include classroom instruction combined with many immersive outdoor activities. It will culminate with a poster session for students' friends and family, during which the camp attendees and their teacher/mentors illustrate an environmental issue in their community and a proposed community project of their choosing that will improve their local environment.

SRU's campus includes over 150 acres of Audubon Society sanctuaries, native trees and plantings, the biology/ecology test plots, community organic vegetable gardens, a community composting area, and interpretive nature hiking trails that are used as outdoor classrooms.



Immersive, sustainability-focused educational study programs are offered to students who help manage and maintain The Robert A. Macoskey Center for Sustainable Systems Education and Research, including the LEED Silver O&M Harmony House. There they regularly engage the broader community and hone their civic skills by providing classroom instruction, tours of the site (gardens, composting system, greywater system, alternative energy systems, etc.), guided nature hikes, and workshops on organic agriculture and permaculture principles. The students also engage the community using social media and hosting events such as the annual Earth Week Festival, Harvest Day, and on-site workshops.

We use the ASSHE STARS Report to monitor our progress toward ensuring that 100% of our graduates are environmentally and sustainability literate. Some indicators/benchmarks included in the STARS Report include the number of sustainability-focused and related courses offered, student sustainability literacy survey results, and similar metrics.